

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A Mmethod for thermally galvanizing an object, ~~s, in particular metal objects,~~ comprising the steps of:
 - pretreating an object for treating, including removing ~~the~~ a surface layer from the object;
 - arranging the ~~pretreated~~ object in a flux bath for fluxing of the object; and
 - arranging the ~~fluxed~~ object in a zinc bath, such that in order to have the material of the object reacts with zinc and in the zinc bath to apply a zinc-containing layer to the object,
 - wherein the step of pretreating comprises of blasting the object with grains so as to remove at least the surface layer.
2. (Currently Amended) The Mmethod as claimed in claim 1, wherein ~~the~~ an average diameter of the grains ~~amounts to~~ is selected to be between 0.25 and 1.6 mm.
3. (Currently Amended) The Mmethod as claimed in claim 1 or 2, wherein about 40% of the grains are selected to have ~~has~~ an average grain size of 0.6-1.0 mm and 60% of the grains are selected to have ~~has~~ an average grain size of 0.8-1.3 mm.
4. (Currently Amended) The Mmethod as claimed in one of claims 1, ~~or~~ 2, wherein the grains are manufactured from steel with a low carbon content, ~~preferably less than 0.18% by weight.~~

5. (Currently Amended) The Mmethod as claimed in claim 1, wherein between the ~~step of shot-blasting~~ and the ~~step of fluxing~~, the object is substantially cleaned by blowing ~~blown~~ clean with air and/or is ~~sprayed~~ spraying clean with liquid, or both.

6. (Currently Amended) The Mmethod as claimed in claim 5, wherein the liquid is water ~~to which chemical additives are preferably added to enhance draining of the liquid from the object.~~

7. (Currently Amended) The Mmethod as claimed in claim 1, wherein after the ~~step of galvanizing~~, air is guided along the object to blow off any zinc droplets on the object.

8. (Currently Amended) The Mmethod as claimed in claim 7, comprising of feeding the blown-off zinc droplets back into the zinc bath.

9. (Currently Amended) The Mmethod as claimed in claim 1, wherein the ~~step of~~ arranging the object in at least one of the baths comprises ~~of~~ having the object move through the at least one of the baths-in-question.

10. (Currently Amended) The Mmethod as claimed in claim 9, further comprising ~~of~~ transporting the object in a substantially uninterrupted manner through the at least one of the baths.

11. (Currently Amended) The Mmethod as claimed in claim 9 ~~or 10~~, further comprising ~~of~~ transporting the object through the at least one of the baths at ~~practically~~ substantially constant speed.

12. (Currently Amended) The Mmethod as claimed in claim 14, wherein the ~~transporting speed through~~ arranging of the object in the zinc bath is comprises transporting the object at a speed in the order of magnitude of 50 to 250 cm, and preferably 80 cm, per minute.

13. (Currently amended) The Mmethod as claimed in claim 1, further comprising of drying the fluxed object.

14. (Currently amended) The Mmethod as claimed in claim 1, further comprising of cooling the object after the arranging in the zinc bath~~provided with a zinc layer.~~

15. (Currently amended) The Mmethod as claimed in claim 1, further comprising of subjecting the object ~~provided with a zinc layer~~ to a burnishing treatment after the arranging of the zinc bath.

16. (Currently Amended) A Ssystem for thermally galvanizing an objects, ~~in particular metal objects,~~ comprising:

_____ an overhead track provided with a suspension elements from which ~~one or more~~ said objects ~~for treating~~ can be suspended;
_____ ~~in addition to~~ drive means for displacing the suspension elements along the overhead track; ~~wherein there are disposed along the overhead track at least:~~

- one or more shot-blasters for hurling ~~one or more streams~~ of grains in the direction of an said object ~~being displaced~~ suspended along the overhead track therealong for the purpose of removing at least ~~the~~ a surface layer from ~~the~~ said object;

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- a flux bath for fluxing the said object when it is within
~~displacing through~~ the bath;
- a galvanizing bath for thermally galvanizing the said
object when it is within ~~displacing through~~ the bath.

17. (Currently Amended) The Ssystem as claimed in claim 16,
wherein the one or more shot-blasters are disposed to blast the
said object for treating at a ~~number~~ plurality of predetermined
blasting angles.

18. (Currently Amended) The Ssystem as claimed in claim 17,
wherein the one or more shot-blasters are disposed in a casing
having an entrance opening and an exit opening, the dimensions
of the entrance opening and exit opening ~~of which are~~ adjustable
depending on the form and dimensions of the said objects when
said object is within ~~displacing through~~ the casing.

19. (Currently Amended) The Ssystem as claimed in claim 16, ~~17~~
~~or 18~~, wherein the overhead track ~~is embodied with~~ comprises at
least one descending part and at least one ascending part for
respectively carrying the said objects downward into the flux or
galvanizing a bath and upward out of the flux or galvanizing
bath.

20. (Currently Amended) The Ssystem as claimed in claim 16,
further comprising:

 detection means for detecting said an object hanging from
~~one of the~~ the suspension elements, and

 ~~in addition to~~ control means for controlling the drive
means of the overhead track and ~~at least the~~ the one or more

shot-blasters in order to interrupt the driving of the suspension element and the shot-blasters with a predetermined time delay.

21. (Currently amended) The Ssystem as claimed in claim 16, comprising:

_____ means for drying the said objects, and

_____ means for cooling said object or burnishing said the objects, or both ~~and/or means for burnishing the objects.~~

22. (Currently amended) The Ssystem as claimed in claim 16, ~~wherein~~ further comprising cleaning means, ~~are provided~~ between the ~~blasting means~~ one or more shot blasters and the flux bath, for substantially cleaning by blowing the said object clean with air ~~and/or~~ removing material residues from the said object with liquid, or both.

23. (Currently Amended) The Ssystem as claimed in claim 22, further comprising:

_____ collecting means for collecting ~~the~~ a mixture of material residues ~~and with~~ air, ~~and/or~~ liquid, or both;

_____ means for separating the material residues, and

_____ means for feeding the air, ~~and/or~~ the liquid, or both back to the cleaning means.

24. (Currently amended) The Ssystem as claimed in claim 16, wherein means are disposed at a position beyond the galvanizing

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bath for guiding air along ~~the~~ said object so as to blow off zinc droplets on ~~the~~ said object.

25. (Currently amended) The system as claimed in claim 16,
~~Suspension element for suspending an object in a system as~~
~~claimed in claim 16,~~ wherein the suspension element is
manufactured from an alloy ~~such~~ characterized in that
substantially no zinc is absorbed or adheres to ~~the~~ a surface of
the suspension element.

26. (Currently amended) The ~~S~~system as claimed in claim 16 for
performing the method of claim 1.

27. (Currently amended) A dDevice for shot-blasting at least
~~one or more object,s, in particular metal objects for~~
~~galvanizing,~~ comprising:

- a housing ~~provided~~ with an entrance opening and an exit
opening for respectively supplying and respectively discharging
~~the~~ said objects for shot-blasting;

- displacing means for displacing ~~the~~ said objects ~~for~~
~~shot-blasting~~ in a path through the housing from the entrance
opening to the exit opening;

- shot-blasters ~~which~~ are disposed on both sides along the
path in the housing and are oriented differently in relation to
the housing, and which hurl streams of grains at said ~~an~~ object
in a ~~number~~ plurality of ~~different~~ blasting directions for the
purpose of removing a surface layer from ~~the~~ said object over
substantially ~~the~~ a whole surface thereof.

28. (Currently amended) The ~~D~~device as claimed in claim 27,
wherein the displacing means comprises:

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- an overhead track extending along the route path,
 - one or more suspension elements which can be fixed to the overhead track and from which the said objects ~~for displacing~~ can be suspended;
 - drive means for displacing the one or more suspension elements along the overhead track;
 - a first guide element placed ~~on a first side~~ along the route path;
 - a second guide element placed ~~on an~~ opposite to the first guide element side along the route path,
- wherein the mutual distance between the first guide element and the second guide element is adjusted to the dimensions of the said object.

29. (Currently amended) The ~~D~~device as claimed in claim 28, wherein the first guide elements and the second guide element are adapted for fastening ~~of the guide elements~~ at different intermediate distances from each other, depending on the dimensions of said ~~the~~ object.

30. (Currently amended) The ~~D~~device as claimed in claim 28 or 29, wherein a at least one of the one or more suspension elements engages a on ~~the~~ top side of said ~~an~~ object and the first guide elements and second guide element are disposed ~~in order~~ along the path such that ~~to limit~~ the transverse displacement of underside of said ~~the~~ object is limited.

31. (Currently amended) The ~~D~~device as claimed in claim 28 ~~or~~ 29, wherein ~~said~~ the intermediate distances is ~~are~~ adjustable

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to be a maximum of 30 cm, ~~preferably a maximum of 10 cm~~, greater than the ~~relevant~~ dimensions of the said object.

32. (Currently amended) The Ddevice as claimed in claim 28, wherein the one or more suspension elements ~~is~~ are manufactured from an alloy ~~such~~ characterized in that substantially no zinc is absorbed or adheres to the surface of the one or more suspension elements.

33. (Currently amended) The Ddevice as claimed in claim 27, wherein the sizes of the entrance opening and the exit openings are ~~is~~ adjustable.

34. (Currently amended) The Ddevice as claimed in claim 33, wherein the at least one of the entrance opening and ~~or~~ the exit opening is defined by doors slidable relative to each other.

35. (Currently amended) The Ddevice as claimed in claim 33 or 34, comprising:

_____ first detection means positioned ~~elose~~ proximate to the entrance opening with which the dimensions of ~~the following~~ said object for shot-blasting can be determined, ~~in addition to~~

_____ control means ~~which are~~ coupled to the first detection means and with which the size of the entrance opening and exit opening can be set subject to the detected object size.

36. (Currently amended) The Ddevice as claimed in claim 27, comprising ~~a number of, preferably four,~~ shot-blasters positioned on one side of the path and ~~a number of, preferably~~

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~~four~~, about four shot-blasters positioned on the opposite side of the path.

37. (Currently amended) The Ddevice as claimed in claim 27, wherein the shot-blasters are ~~embodied~~ configured to hurl streams of grains with an average grain diameter between 0.25 and 1.6 mm.

38. (Currently amended) The Ddevice as claimed in claim 27, further comprising:

_____ second detection means for detecting an object hanging from one of the suspension elements~~;~~;

_____ ~~in addition to~~ control means for controlling the drive means of the overhead track and at least the shot-blasters in order to interrupt the driving of ~~the~~ one or more suspension elements and the shot-blasters with a predetermined time delay.

39. (Currently amended) The Ddevice as claimed in claim 27, comprising control means which ~~are~~ is coupled to the shot-blasters and the displacing means, and which ~~are~~ is adapted to adjust a suitable blasting capacity subject to ~~the~~ a running speed produced by the displacing means.

40. (Currently amended) The Ddevice as claimed in claim 39, wherein the shot-blasting capacity is defined by the quantity of grains per unit of time, the blasting angles, ~~and/or~~ the force with which the grains strike the object, or any combination thereof.

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41. (NEW) The method as claimed in claim 4, wherein the carbon content is selected to be less than 18% by weight.

42. (NEW) The method as claimed in claim 6, further comprising adding chemical additives to the water to enhance draining of the liquid from the object.

43. (NEW) The method as claimed in claim 12, wherein the speed is approximately 80 cm per minute.

44. (NEW) The device as claimed in claim 31, wherein the intermediate distances are adjustable to be a maximum of 10 cm greater than the relevant dimension of said object.

45. (New) A system for thermally galvanizing an object comprising:

an overhead track provided with a suspension element from which some objects can be suspended;

a driver coupled to the suspension elements to displace them along the overhead track;

a shot blaster proximate to said object when it is suspended along the overhead track and having sufficient force to remove a surface layer from said object by hurling grains in the direction of said object;

a flux bath below the overhead track; and

a galvanizing bath below the overhead track.

46. (New) A device for shot-blasting at least one object comprising:

a housing with an entrance opening and an exit opening;

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a path projecting through the entrance opening and exit opening and having an attachment fixed to and displaceable along the path, the attachment configured to removably engage the at least one object;

a plurality of shot-blasters disposed on both sides along the path within the housing and oriented differently in relation to the housing, and which hurl streams of grains in the direction of said object in a plurality of blasting directions with sufficient force as to remove a surface layer from said object over substantially a whole surface thereof.